C of C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the patent of:

Piero Del SOLDATO

ATTN: Certificates of Corrections

Patent Number: 6,869,974 B1

Issued: March 22, 2005

For: PHARMACEUTICAL COMPOUNDS

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

August 25, 2006

Sir:

The undersigned respectfully requests that a Certificate of Correction be issued for the above-identified patent as indicated on the attached Form PTO-1050.

REMARKS

This request is being made in order to correct an error in the claims. In support of this request, enclosed is a copy of the Amendment dated August 4, 2004, in which the chemical formula (as specified on the attached PTO-1050 Form) in Claim 1 was deleted.

Since the error in the patent appears to be a Patent and Trademark Office printing error, it is respectfully submitted that no fee is required.

In the event that any fees are due with respect to this paper, please charge our Deposit Account No. 01-2300, referencing Atty. Docket No. 026220-00014.

Respectfully submitted,

Amy E.L. Schoenhard
Reg. No. 46,512

Atty. Docket No.: 026220-00014

Customer No.: 004372
Arent Fox PLLC
1050 Connecticut Avenue, N.W.
Suite 400
Washington, D. C. 20036-5339
Tel (202) 857-6000
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ALS:mmg

Enclosures: Form PTO-1050 (2); Amendment dated August 4, 2004 (copy)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.: 6,869,974 B1

DATED: March 22, 2005

INVENTOR(S): Piero Del SOLDATO

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Columns 72 to 73 -

Delete in its entirety the chemical formula starting at line 60 in Column 72 and ending at line 8 in Column 73.

MAILING ADDRESS OF SENDER:

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339

Patent No. 6,869,974 B1

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FORM PTO 1050 (REV. 3-82)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.: 6,869,974 B1

DATED: March 22, 2005

INVENTOR(S): Piero Del SOLDATO

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Columns 72 to 73 -

Delete in its entirety the chemical formula starting at line 60 in Column 72 and ending at line 8 in Column 73.

MAILING ADDRESS OF SENDER:

Customer No. 004372
ARENT FOX PLLC
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Washington, D.C. 20036-5339

Patent No. 6,869,974 B1

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:	Confirmation No.: 5184
Del Soldato	Group Art Unit: 1624
Application Serial No.: 09/926,326	Examiner: Raymond, R.L.
Filed: October 15, 2001	Attorney Docket No.: 026220-00014
For: Pharmaceutical Compounds	

August 4, 2004

* * * * * * *

AMENDMENT AND RESPONSE UNDER 37 C.F.R. §1.111

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is in response to the official action dated May 5, 2004, wherein the pending claims were rejected under 35 U.S.C. §112. The applicant respectfully traverses in view of the following amendments and remarks.

I. Amendments to the Claims begin on page 2 of this response;

II. Remarks begin on page 9 of this response; and

III. Conclusion begins on page 11 of this response.

I. AMENDMENTS TO THE CLAIMS

Claims 1 to 10. (Canceled)

Claim 11. (Currently Amended) A compound or its salt having the following general formula (I):

$$A\text{-}B\text{-}C\text{-}N(O)_2 \qquad (I)$$

wherein:

A = $R\text{-}T_1$-, wherein

R is the radical of the drug, as defined hereunder, having the formula $R\text{-}T_1\text{-}Z$ or $R\text{-}T_1\text{-}OZ$ in which Z is H or $C_1\text{-}C_5$ alkyl, selected from the following classes:

anti-inflammatory drugs: acetylsalicylic acid, 5-aminoacetylsalicylic acid, carprofen, diclofenac sodium salt, diflunisal, etodolac, flufenamic acid, flunixin, flurbiprofen, ibuprofen, indomethacin, indoprofen, ketoprofen, ketorolac, lornoxicam, loxoprofen, meclofenamic acid, mefenamic acid, meloxicam, mesalamine, naproxen, niflumic acid, olsalazine, piroxicam, salsalate, sulindac, suprofen, tenoxicam, tiaprofenic acid, tolfenamic acid, tolmetin and zomepirac;

~~analgesic drugs: acetaminophen, acetylsalicylsalicylic acid, benoxaprofen and tramadol;~~

bronchodilators drugs: albuterol, carbuterol, clenbuterol, diphylline, etofylline, fenoterol, metaproterenol, pirbuterol, salmeterol and terbutaline;

expectorant drugs: ambroxol, bromexine and guaiacol;

~~antihistaminic drugs: cetirizine, levocabastine and terfenadine;~~

~~ACE-inhibitors: captopril, enalapril, lisinopril and ramipril;~~

~~beta-blockers: alprenolol, atenolol, bupranolol, labetalol, metipranolol, metoprolol, pindolol, propranolol, timolol;~~

~~antithrombotic and vasoactive drugs: argatroban, clopidogrel, dalteparin, dipyridamole, enoxaparin, iloprost, ozagrel, trifusal and benfurodil hemisuccinate;~~

~~antidiabetic drugs: nicotinamide;~~

antitumoral drugs: anthramycin, daunorubicin, doxorubicin and epirubicin;

~~antiulcer drugs: cimetidine, omeprazole and pantoprazole;~~

~~antihyperlipidemic drugs: atorvastatin, fluvastatin, lovastatin, pravastatin sodium salt and simvastatin;~~

antibiotics drugs: amoxicillin, ampicillin, aztreonam, biapenem, carbenecillin, cefaclor, cefadroxil, cefamandole, cefatrizine, cefoxitin, dicloxacillin, imipenem, meclocycline, methacycline, moxalactam, panipenem, bacampicillin, apicycline, clomocycline and oxytetracycline;

~~antiviral drugs: acyclovir, famciclovir, ganciclovir, penciclovir, vidarabine and zidovudine;~~

bone resorption inhibitors: alendronic acid, etidronic acid and pamidronic acid;

antidementia drugs: tacrine;

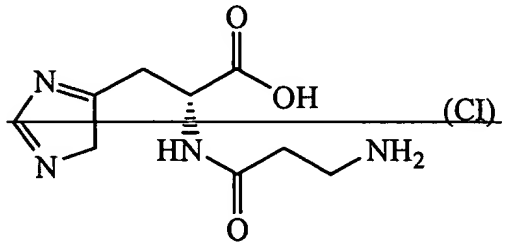
T_1 = ~~(CO), O, S, N or NR_{1C}~~ (CO), O, S, or NR_{1C}, wherein R_{1C} is ~~H or C_1-C_5 alkyl~~ H, C_1-C_5 alkyl, or a free valence;

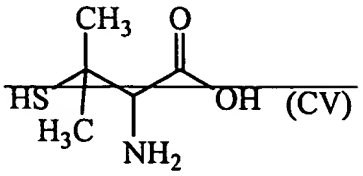
B = $-T_B$-X_2-T_{BI}– wherein

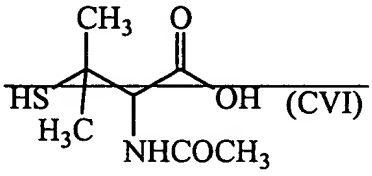
T_B and T_{BI} are equal or different, T_B is (CO) when T_1 is (CO), O, S, or NR_{1C}, ~~and can be selected from (CO), O, S, N or NR_{1C}~~ wherein R_{1C} is as above defined, TB is O when T1 is (CO), TBI is (CO) or O;

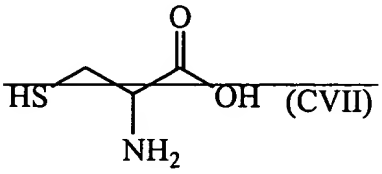
X_2 is a bivalent bridging group such as the corresponding precursor of B, having the formula Z'-T_B-X_2-T_{BI}-Z" in which Z', Z" are independently H or OH, is selected from the following compounds:

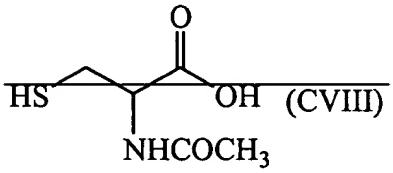
~~Aminoacids: L-carnosine (CI), penicillamine (CV), N-acetylpenicillamine (CVI), cysteine (CVII), N-acetylcysteine (CVIII):~~



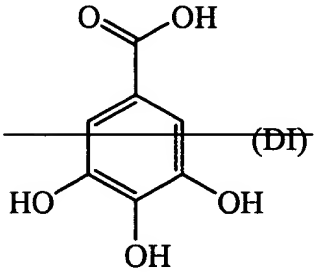


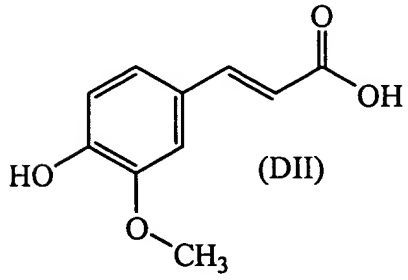


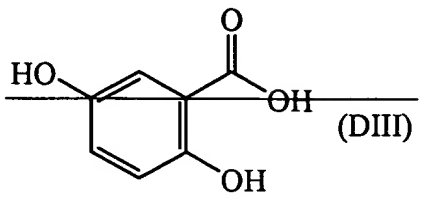




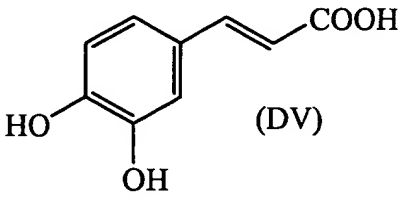
- Hydroxyacids: ~~gallic acid (DI)~~, ferulic acid (DII), ~~gentisic acid (DIII)~~, caffeic acid (DV), hydro caffeic acid (DVI), p-coumaric acid (DVII), ~~vanillic acid (DVIII), syringic acid (DXI)~~:



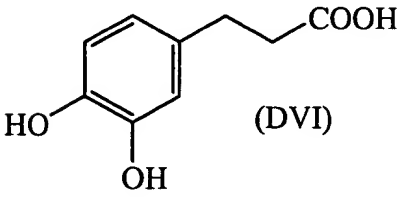




(DIII)



(DV)



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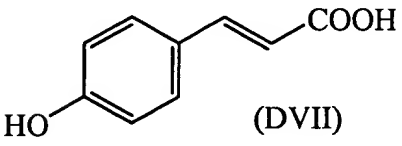
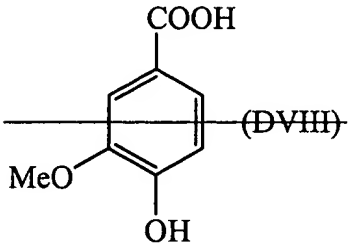
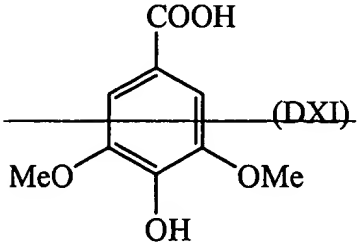


(DVII)

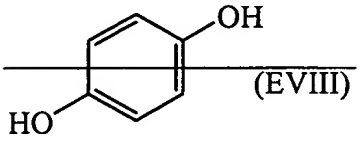


~~(DVIII)~~

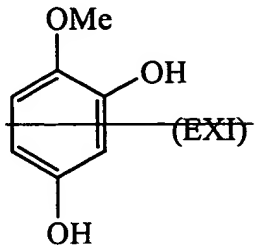


~~(DXI)~~

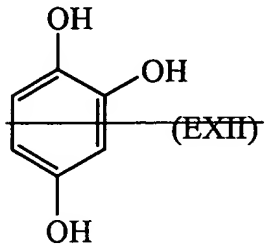
~~aromatic polyalcohols: hydroquinone (EVIII), methoxyhydroquinone (EXI), hydroxyhydroquinone (EXII), conyferyl alcohol (EXXXII), 4-hydroxyphenetyl alcohol (EXXXIII), p-coumaric alcohol (EXXXIV):~~



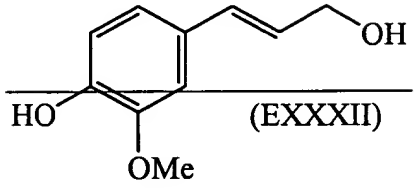
~~(EVIII)~~



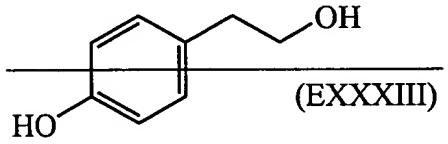
~~(EXI)~~



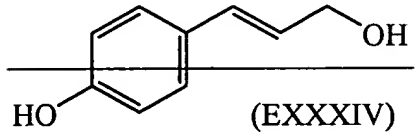
~~(EXII)~~



(EXXXII)



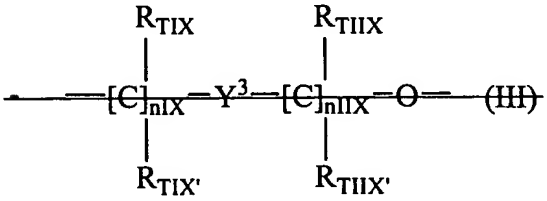
(EXXXIII)



(EXXXIV)

C is the bivalent -T_c-Y- radical, wherein T_C ~~= (CO), O, S, N or NR_{1C}, R_{1C} being as above defined~~ is (CO) when T_{BI} is O, T_C is O when T_{BI} is (CO);

Y is ~~has the following meanings:-~~ a linear or branched ~~C_1-C_{20} alkylenoxy~~ (C_1-C_{20})-alkylenoxy group ~~or a cycloalkylene having from 5 to 7 carbon atoms, in the cycloalkylene ring one or more carbon atoms can be substituted by heteroatoms, the ring may have side chains of R' type, R' being as above defined; or~~



(III)

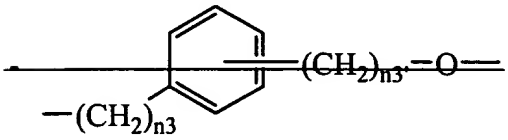
~~wherein:~~

~~nIX is an integer between 0 and 3;~~

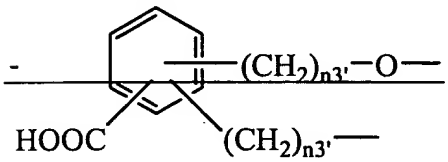
~~nIIX is an integer between 1 and 3;~~

~~R_{TIX}, $R_{TIX'}$, R_{TIIX}, $R_{TIIX'}$ equal to or different from each other are H or a linear or branched C_4-C_4 alkyl;~~

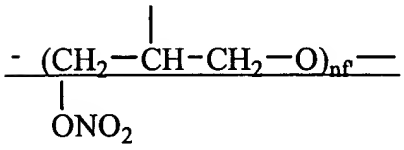
~~Y^3 is a saturated, unsaturated or aromatic heterocyclic ring containing at least one nitrogen atom, said ring having 5 or 6 atoms;~~

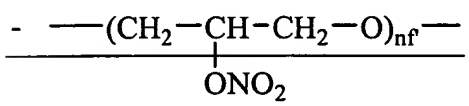


~~wherein n3 is an integer from 0 to 3 and n3' is an integer from 1 to 3;~~

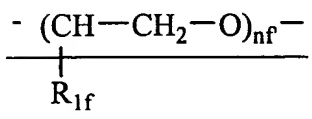


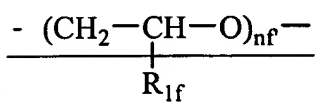
~~wherein n3 and n3' have the above mentioned meaning;~~





~~wherein nf' is an integer from 1 to 6;~~





~~wherein R_{1f} = H, CH_3 and nf is an integer from 1 to 6~~.

Claim 12. (Canceled)

Claim 13. (Currently Amended) The compound or salt according to claim 11, wherein Y_1 is a ~~C_4-C_6~~ linear or branched ~~alkylenoxy~~ $(C_1$-$C_6)$-alkylenoxy group.

Claim 14. (Previously Presented) A drug comprising the compound or salt according to claim 11, in combination with a pharmaceutically acceptable carrier.

Claim 15. (Previously Presented) A method for treating oxidative stress dysfunction, said method comprising administering a therapeutically effective amount of the compound or salt according to claim 11 to a patient in need thereof.

Claim 16. (Previously Presented) A pharmaceutical formulation containing the compound or salt according to claim 11 as an active component.

Claim 17. (New) The compound or salt according to claim 11, wherein the bivalent bridging group X_2 is ferulic acid (DII).

Claim 18. (New) The compound or salt according to claim 17, wherein Y is a linear or branched (C_1-C_6)-alkylenoxy group.

II. REMARKS

Preliminary Remarks

Upon entry of this Amendment, claims 11, and 13 to 18 will be pending, of which claim 11 is independent. Claims 11 and 13 are amended, claim 12 is canceled, and claims 17 and 18 are new. Support for the claim amendments and the new claims can be found in the specification and claims as originally filed (see, for example, page 73). Therefore, the applicants believe that no new matter is introduced.

This response is filed within the shortened statutory period for response, no fee due. The applicant respectfully request reconsideration and allowance of the present application.

Patentability Remarks

Rejections under 35 U.S.C. 112 –

Claims 11 to 16 were rejected under 35 U.S.C. §112, first and second paragraphs, and for including improper Markush claims. The applicant respectfully traverses in view of the preceding claim amendments and succeeding remarks.

Claim 12 is canceled. As amended, claims 11, and 13 to 16 are directed to, *inter alia*, a compound or its salt of formula A-B-C-$N(O)_2$, in which X_2 of B is limited to hydroxyacids of formula (DII), (DV), (DVI), and (DVII), and Y in C to a linear or branched (C_1-C_{20})-alkylenoxy group. Further, the specification as filed contains at least ten examples of compounds representing the general classes of compounds selected. These examples include:

- Example 5 (ibuprofen), 6 (flurbiprofen), 15 (mesalamine), and 25 (piroxicam), representative of anti-inflammatory drugs;
- Example 23 (diphylline), representative of bronchodialatory drugs;
- Example 9 (lambroxol), representative of expectorant drugs;
- Example 28 (doxorubicin), representative of anti-tumoral drugs;
- Example 13 (ampicillin), representative of antibiotics;
- Example 10 (alendronic acid), representative of bone resorption inhibitor drugs; and

- Example 17 (tacrine), representative of anti-dementia drugs.

The applicant respectfully submits that claims 11, and 13 to 16 (and new claims 17 and 18) are fully enabled by the specification under 35 U.S.C. §112, first paragraph, not indefinite under 35 U.S.C. §112, second paragraph, and include proper Markush claims. Therefore, the applicant respectfully requests withdrawal of these rejections.

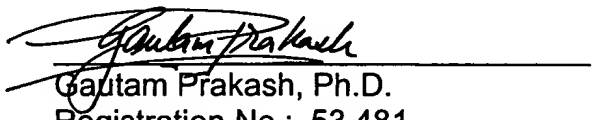
III. CONCLUSION

In view of the amendments and remarks above, the applicant respectfully submits that this application is in condition for allowance and requests favorable action thereon.

In the event this response is not timely filed, the applicant hereby petitions for an appropriate extension of time. The fee for this extension, along with any other additional fees which may be required with respect to this response, may be charged to Deposit Account No. 01-2300, referencing Attorney Docket No. 026220-00014.

Respectfully submitted,

ARENT FOX PLLC



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/GP